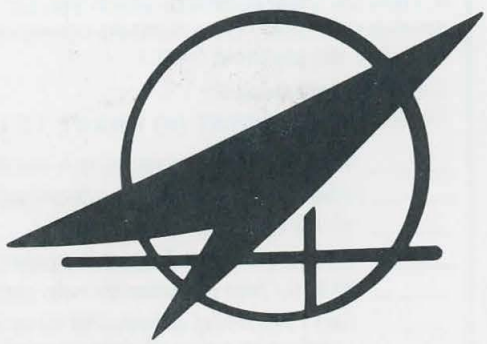
4-H Circular 582

SELF-DETERMINED AEROSPACE

MEMBER'S PLANNING GUIDE

COOPERATIVE EXTENSION SERVICE
THE OHIO STATE UNIVERSITY



4-H AEROSPACE PROGRAM

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SELF-DETERMINED AEROSPACE

Member's Planning Guide

Now that you have some experience in the 4-H aerospace project, you may have a special interest area that you would like to explore in more detail. This is known as a self-determined project. You (1) select a topic that would be different from what is in the present 4-H aerospace program or an expansion of what is now offered, (2) determine your own goals, (3) plan how to reach these goals, (4) do your own thing, and (5) evaluate your project according to how well it taught what you had hoped to learn. A self-determined project can be an individual or group project.

You may want to use the suggested planning form on page or design your own planning guide to determine project details. The sample aerospace self-determined project planning form will give some ideas on how to plan. Your leader may ask you some questions about your project before he or she approves it. Here are a few questions which you can ask yourself as you develop your plan. (The numbers correspond to the numbers found on the planning form.)

(1) WHAT DO I WANT TO LEARN?

_____ Why do I want to study this area?
_____ What do I really want to accomplish?
_____ Will it help me in the future?
_____ What can I learn from this project?
_____ Will my past experiences help me in this project?
_____ Can I learn and accomplish what I want to in this project in terms of time, money, and energy?
_____ What other things such as school activities will I be doing which will affect this project in terms of time, money, and energy?
_____ Can I do this project alone or should it be a group project?

(2) WHERE CAN I LOCATE INFORMATION?

_____ What resource people are available?
_____ What other resources such as libraries are available for this project? Are they adequate?
_____ Can I obtain some material by writing to individuals or companies?
_____ Are resource people willing to help me on this project?

(3) HOW WILL I DO THIS PROJECT?

_____ Have I outlined what I plan to do?
_____ Will it be possible to do all of these things or should I cut out some items?
_____ How much will it cost? Can I afford to do this project?
_____ After checking my resources, can I still do this project as it is? Or can it be revised? Or should I drop this project entirely at this point?
_____ Will this project interest me enough so I do not drop it half way through the project?

(4) WHEN WILL I DO IT?

_____ Have I allowed enough time? Too much time?
_____ Have I gotten my leader's suggestions on time requirements?

_____ Have I asked my parents to consider the time requirements for this project?

(5) HOW WILL I DETERMINE MY ACCOMPLISHMENTS

_____ Have I chosen methods to measure my results?

_____ Can I easily evaluate my project with the method of evaluation I have planned?

_____ Will it be possible for me to write this up in a clear understandable manner so that other people as well as myself will know exactly what I did?

_____ How will this project help me personally?
Will it help others?

_____ Can this project help me in making future career decisions?

AFTER PLANNING AND ASKING THE ABOVE QUESTIONS–ASK YOURSELF:

Do I still think this a worthwhile project ✓ Yes ___ No

If your answer is YES–You may proceed by checking your project with your parents and leader.

If your answer is NO–You'd better revise your plans or choose another topic for study.

Determine your own methods of evaluation. There are many ways you can do this. It could mean asking your friends or teachers or other adults how they see your project and accomplishments. You might want to go back and ask some of the same questions you asked when deciding on a project and determing the objectives you wanted to carry out. You need to have an evaluation method that will be meaningful and understandable to you so that you can use it as a guide in determining how you did on this project.

You probably have some concerns about yourself. You probably want to know why you are what you are, why you think and act as you do, how you are different from others, and how you are like them. You might want to know how you can get along better with others, how you can develop a better personality, and how you can build a happy useful life. Hopefully, through planning, developing, carrying out, and evaluating a self-determined project you can better understand yourself and your capabilities.

Leadership–you are perhaps accustomed to having a project leader. You will still have a project leader in a self-determined project, but this leader will serve only as an advisor. The leader may be your regular 4-H leader or another resource person such as your airport manager, a local pilot, high school teacher, parents, or friends who are qualified in your subject area. Your local 4-H leader and/or Extension agent can help you choose a leader. When you explain what you are doing, you will find that most people will be very cooperative and interested in your project. Here are some ideas to help you gather information and background materials for your project.

1. Be aware of the speakers in your community or county who have information on your topic. For example, if you are concerned about a project on pollution by aircraft power plants, watch the newspaper and other publicity for any speakers who might be talking on this topic.

Subject Air foils and wind tunnels Name Johnny Space

(Sample)
PLANNING FORM
Self-Determined Project
Aerospace Project

1. What do I want to learn?	2. Where can I locate information? Persons	Other	3. How will I do this?	4. When will I do this?	5. How will I determine accomplishments?
How to design, build, and experiment with a wind tunnel	Science teachers	Estes Industries Technical Report TR-5	Discuss the Estes plans with teacher and leader. Write Beechcraft for information on air foils	Spring and summer of 1972	How well the wind tunnel operates
The effects of different kinds of air foils on lift, drag, and stability	4-H leader	Beechcraft Aircraft Corporation	Have my dad help me construct the wind tunnel		Observe the characteristics of different air foil designs.

Beginning Date April 5, 1972

Projected Completion Date _____

Approved by _____
Parent

Approved by _____
4-H Project Leader

2. Determine the type of questions you need answered about your topic. This might mean just sitting down, taking a blank pad of paper, and writing suggestions, or this might mean questioning other friends or relatives to see what they would like to know about a topic to see if some of these things interest you.
3. Visit your local library. If they do not have the resources you need, ask the librarian how to get them.
4. Prepare a questionnaire or quiz, and give it to some of your friends to determine how much they know about your topic.
5. You may want to include other 4-H'ers. You may need to set up a planning committee to determine the types of things that you can do as a group.

Self-Evaluation

This check sheet is designed to help you rate yourself or to make an evaluation as you are going along with your project. You may wish to visit with your leader about this after you have checked it or you may wish to keep it for your own evaluation.

	Good	Fair	Need improvement
1. Have I set up goals that are possible to achieve?	✓		
2. Do I follow or consider ideas?	✓		
3. Do I admit when I don't understand something?		✓	
4. Do I ask questions of my leader, parents, friends, and others to help clarify points I don't understand?		✓	
5. Do I share my knowledge?	✓		
6. Do I share information when it may be helpful to others?	✓		
7. Have I concentrated on the details of my project?		✓	
8. Do I try to summarize and relate it to other activities in which I am involved?		✓	
9. Do I stay on the track?	✓		
10. Do I really understand my goals and try to work toward them?	✓		
11. Am I aware of the efforts of others in the same or similar project?	✓		
12. Can we evaluate each other's projects?			✓
13. Am I striving to do a more than adequate job?		✓	
14. Do I stimulate myself to plan and carry out a worthwhile project?		✓	
15. Am I flexible about this project?	✓		
16. Am I willing to take suggestions from leaders and others?	✓		
17. Do I accept criticism from other 4-H'ers with a sense of understanding?	✓		
18. Have I talked to qualified people who can contribute toward my project?			✓
19. Do I know what resources are available and am I using them to my best advantage?	✓		
20. Am I using libraries, museums, public agencies, civic organizations, newspapers, magazines, and other resources?	✓		
21. Am I recording through the use of pictures, newsclippings, etc., the resource material that is useful to me in this project?	✓		
22. Am I using some of the resource material to help me modify or reach some of the goals of this project?	✓		
23. Have I sought evaluation help?			✓
24. Have I been willing to look at my total project and determine whether I am really meeting the objective goals of this project?	✓		
25. Have I grown personally in carrying out the various aspects of this project?		✓	
26. Have I shared this material so that it will help others in my club or my community?	✓		

Description and Evaluation Project

Now that you have planned and explored this project, you will want to write a report of what you hope to accomplish. Then, as you proceed, keep track and describe how you did the project, where and from whom you received information, and how you evaluated your accomplishments. You perhaps will want to insert this description into your regular 4-H report book. You may want to explore ways of sharing your project through a regular 4-H meeting, newspaper releases, school report, or radio program.

4-H programs, projects and activities conducted by the Ohio Cooperative Extension Service are available to boys and girls on a nondiscriminatory basis without regard to race, color, creed or national origin.

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